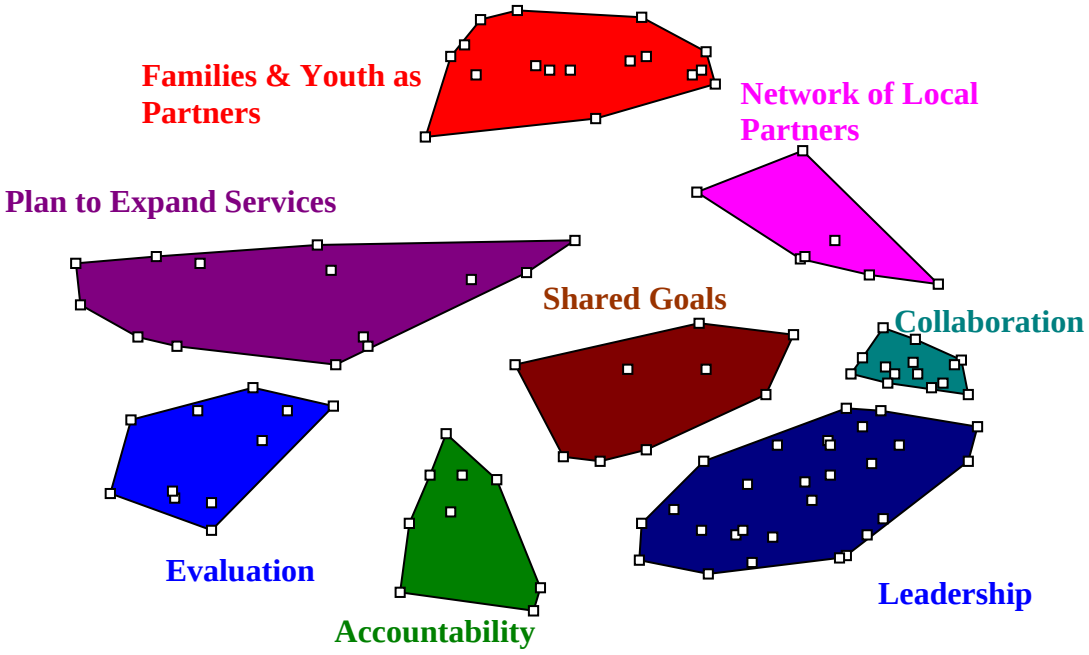
DEFINING COMMUNITY READINESS

for the

IMPLEMENTATION OF A SYSTEM OF CARE



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Acknowledgements

We have thoroughly enjoyed the opportunity to study community readiness to implement a system of care for children and youth with mental health disorders and their parents. We have used the Internet based method of concept mapping to obtain information from across the country, thus allowing collection of information from a large number of stakeholders in a short period of time. The software designed by Concept Systems, Inc. (2006) has provided means to statistically analyze the data obtained.

We believe that the method of collecting and analyzing data has been successful and has yielded interesting and useful information. The information we obtained provides new understanding of the concepts (factors) that are important to be in place for the successful development systems of care. Further, the information provides new, additional understanding of the difficulties of implementing systems of care.

The information gained through this study will be useful as a foundation for planning for communities that are developing applications for system of care funding, as well as for newly funded communities that are developing plans about how to move forward. The information can also be used to rate the completeness of applications submitted for funding.

We appreciate the confidence of Dr. Gary Blau and Diane Sondheimer of the Child, Adolescent and Family Branch of the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services and Dr. Regenia Hicks and Dr. Sharon Hunt at the American Institutes of Research, as we undertook a new approach to gathering information designed to move the field ahead. We also appreciate the time and thoughtfulness of the participants who gave us so much information. Ultimately, we believe that all these efforts will contribute to better services for children and families.

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Defining Community Readiness for the Implementation of a System of Care

Introduction

System of care development has evolved over the past forty years, stimulated by the recommendations of the Joint Commission on Mental Health of Children (1969), a congressionally-appointed body that completed a four-year national study and reported that millions of children were not receiving needed mental health services. More than a decade later *Unclaimed Children*, Knitzer's (1982) national study of mental health services for children and youth revealed serious deficits throughout the country. In 1984, the federal response to these findings launched the first phase of service reform through the Child and Adolescent Service System Program (CASSP), which provided funding to the states to begin restructuring their children's mental health services. Descriptions of the evolving reform efforts can be found in the writings of Behar (1985, 2002), Stroul and Friedman (1986, 1996), Lourie (2002), and Friedman (2005a, 2005b). The Surgeon General's Report (1999) and the report of the New Freedom Commission (2003) have emphasized the value of this reform in improving services to children with mental health disturbances and to their families. System of care policy is promulgated as national policy by the Child, Adolescent and Family Branch of the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

The second phase of child mental health services reform, embodied in the Comprehensive Community Mental Health Services Program for Children and Their Families (2006), is a program that provides funding to states, communities, territories, Indian tribes, and tribal organizations. These funds are designated to improve and expand community-based systems of care and to address the needs of an estimated 4.5-6.3 million children with serious emotional disturbances and their families. Systems of care are developed on the premise that the mental health needs of children, adolescents, and their families can be met within their homes, schools, and communities. The Comprehensive Community Mental Health Services Program for Children and Their Families is based on a philosophy that includes four elements.

1. The mental health service systems should be driven by the needs and preferences of the child and family and addressed through a strength-based approach;
2. The focus and management of services should occur within a multi-agency collaborative environment and should be grounded in a strong community base;
3. The services offered, the agencies participating, and the programs generated should be responsive to the cultural context and characteristics of the populations served; and
4. Families should be lead partners in planning and implementing the system of care.

From the beginning of systems reform, agencies serving children, youth and families have been encouraged to forge new partnerships across the relevant agencies and with parents to design and deliver services for their children. A major emphasis has been placed on serving children and youth in their own homes, to the extent possible, and in their own communities, rather than through institutional care. Positive changes in community systems, i.e., programs, policies, practices, infrastructures, and other factors that shape service delivery, are considered to be important to achieving lasting effects.

The Child, Adolescent and Family Branch of the Center for Mental Health Services provides communities with funding, policy and practice guidance, and technical assistance to improve and expand community based services into coordinated systems of care. Such community transformation is a complex process that involves many stakeholders, including those from public agencies such as mental health, schools, public health, child welfare and juvenile justice, private providers of health and mental health services, families and youth, and community leaders. Recognizing the complexities of the change process, the Child, Adolescent and Family Branch of the Center for Mental Health Services develops cooperative agreements with each community for a six year period, with sizeable funding on average of $1,000,000 per year. The first of these years is a planning year, during which the groundwork for systems change is developed by the community partners. Each year, the Child, Adolescent and Family Branch of the Center for Mental Health Services receives between 50 – 60 applications in response to a structured Guidance for Applications and this office has the capacity to fund approximately 17 - 18 applications per year. These programs represent a considerable investment of government funds, in direct payments, technical assistance and training for the sites, and evaluation of effectiveness. Since the program was authorized in 1992, it has funded 121 grantees across the country; there are currently 57 grant communities and 64 former grant programs, representing a government expenditure of approximately $100 million per year.

From the inception of the program, the Child, Adolescent and Family Branch of the Center for Mental Health Services has sought to identify strategies and processes that enhance successful implementation and support positive outcomes for children and their families. As would be expected, many funded communities implement their proposed programs quite well. Ongoing evaluation of these programs by Macro International (Manteuffel, Stephens, & Santiago, 2002; Manteuffel, Katana, Petrila, Rosales-Elkins, & Stroul, 2006) indicates that although some programs do quite well, others struggle in terms of their capacity to coordinate and integrate services across community agencies, the number of children and families they serve, and the progress these children make.

The concept of "community readiness" offers an important contribution to improving the planning and implementation process for communities. Being able to understand from the very beginning what factors are important to the successful implementation of a system of care would help communities assess their own strengths and weaknesses and address the areas of weakness. Further, such understanding could support efforts of the Technical Assistance Partnership for Child and Family Mental Health, a collaboration between the American Institutes for Research and the National Federation of Families for Children's Mental Health, to better determine areas of focus for their technical assistance to the sites.

There is a meager body of knowledge that defines readiness and that is applicable to the development of systems of care for children and adolescents with serious emotional disturbances. Hodges, Ferreira, Israel, and Mazza, (2007a, 2007b) have focused on factors that contribute positively to the development of systems of care and their work is suggestive of factors supporting readiness. Other researchers, Edwards, Jumper-Thurman, Plested, Oetting, & Swanson (2000) and Staley & Edwards (2006) point out that, "Communities are at many different stages of readiness for implementing programs, and this readiness is a major factor in determining whether a local program can be effectively implemented and supported by the

community." Their Community Readiness Model was developed to provide communities with a theoretical framework, a process, and specific tools to facilitate readiness. Other efforts to develop readiness assessments include 1) Osher and Huff's (2007) *Family Driven Care and Practice System Self Assessment Tool* and *The Community Readiness and Assessment Tool,* which includes a readiness component that taps participant's perceptions regarding the role of families; and 2) an effort by the North Carolina Aging and Disability Resource Network (2008) to assess collaboration of community agencies related to the population that is aging and disabled. All of these instruments address parts of the community readiness issue but not the full range of relevant issues.

Thus, the current study has been designed to further the understanding of community readiness and is based on the assumption that those involved with systems of care have insights to offer on the essential elements for success. The study uses a web-based approach to concept mapping to obtain information from 1) professionals, that is, those who study systems of care, provide consultation and guidance on its development, and those who have managed systems; 2) families who have participated in systems of care; and 3) other members of the communities that have participated in the development of systems of care.

Method of Study

Overview

Concept mapping was used to develop an understanding of the community and systems factors that underlie the concept of community readiness because this method is based on sound research and statistical analyses. To understand community readiness, information was gathered from a panel of national experts and from representatives of advanced and graduated sites funded to develop systems of care. The goal was to better define the boundaries and elements in this complex area by synthesizing input from stakeholders across the country, as well as from national experts in this content area.

Using a concept mapping strategy and Concept Systems, Inc. CS Global© software, the data provided by the national experts has been organized into content areas/domains (clusters) and the information within each cluster has been rated by the site representatives according to importance and difficulty of implementing. The resulting information has identified the concepts that the participants think are central to readiness and are the most important and easiest/most difficult to implement. The findings are derived from multidimensional scaling and cluster analyses, resulting in a detailed, statistically-based description of community readiness.

Concept Mapping

The technique of concept mapping was developed in the 1970's (Novak, 1998) as a way to visually present the ideas of groups on a topic of interest to them. Concept mapping has evolved through the efforts of social scientists and there are many methods now available to collect and analyze information. The method designed by Concept Systems, Inc. (Kane & Trochim, 2007; Trochim, 1989a; Trochim & Linton, 1986) is a mixed-methods (Greene & Caracelli, 1997) planning and evaluation approach that integrates familiar qualitative group processes (brainstorming, and sorting and rating of statements) with multivariate statistical analyses to help a group describe its ideas on any topic of interest and represent these ideas graphically through maps. The process typically requires the participants to brainstorm a large set of statements

relevant to the topic of interest, individually sort these statements into piles of similar ones, and rate each statement on one or more dimensions. Concept Systems, Inc. has developed a research-based methodology to analyze the data obtained. This approach is a "next generation" tool that uses sound methods of analysis of the data gathered, so that the end result is an unbiased and fair description of the input of the participants.

The analyses include multidimensional scaling (MDS) of the sort data, hierarchical cluster analysis of the MDS coordinates, and computation of average ratings for each statement and cluster of statements. These data are then used to generate the maps which show the individual statements, with more similar statements located nearer each other and grouped into clusters. The Concept Systems, Inc. approach has been used effectively to address substantive issues across a wide range of fields, including public health, human services, higher education and industry (Kane & Trochim, 2007; Trochim, Milstein, Wood, Jackson, & Pressler, 2003; Trochim 1989b). Data obtained through concept mapping has also been used to develop rating scales (Rosas, 2008). Samples of groups using concept mapping include the Center for Disease Control and Prevention, the National Cancer Institute, the United States Department of Labor, the Hawaii Department of Health, the Mississippi Department of Mental Health, University of North Carolina School of Public Health, Delta Airlines, Nortell, Citgo, Motorola, and Hallmark. System of care sites using concept mapping for planning, development of logic models, and evaluation include "commUNITYcares" in Mississippi, "Circle of Hope" in Missouri, and three sites of "Integrating Families, Communities, and Providers (IFCAP)" in Florida[1].

Study Sample

Two groups, totaling approximately 223, were invited to participate in this project.

1. The first group consisted of grant communities in their 5th and 6th year of funding from the Center from Mental Health Services, Child, Adolescent and Family Branch. Invitations to participate were sent to 27 sites, including three tribal communities. Those invited included project directors, principal investigators, clinical directors, lead family coordinators, youth coordinators, cultural and linguistic coordinators, technical assistance coordinators, and social marketers (N = 155). The invitations were sent by e-mail from the Deputy Project Director of the Technical Assistance Partnership, American Institutes for Research.. Those invited were asked to forward the invitations to others in their communities, to include parents, agency partners, community leaders, and others that they considered relevant.[2] Additionally, a widespread invitation was issued through the "alumni network," which served to encourage participation.

2. For the second group, a panel of national experts was selected by the investigators. The panel of experts included people from graduated sites and those who have served as consultants, evaluators, trainers, and leaders in the design and development of systems of care (N = 68). Invitations were sent by the investigators directly.

[1] The first three of these sites are funded by the Center for Mental Health Services, Child, Adolescent and Family Branch; the three sites in Florida are funded by Health Resources and Services Administration, Maternal and Child Health Bureau.

[2] As Group 1 invitees were also asked to forward invitations to others in their communities, there is no exact count of how many people were actually invited to respond to the tasks given to Group 1.

Procedure

Using the Concept Systems, Inc. web-based CS Global© system, input about indicators of community readiness were obtained from the participants described above. The two-part process took place during the period of April 24, 2008 – August 17, 2008. Participants' input was collected in two phases. Phase 1, called brainstorming, involved generating a list of community and systems factors. Phase 2 consisted of organizing those factors (sorting) and rating them for Importance and Difficulty of Implementation (rating). The Concept System computer software version 4.147 was used to perform all analyses and produce all of the maps and statistical results.

1. *Phase 1 (Generating Statements)*: This first part of the study was completed during the period of April 24 - May 30, 2008. Members of Group 1 and 2 combined were asked to participate. Of the approximately 223[3] people invited from both groups, 135 (61%) participated and of these, 115 (85%) completed the task. All participants were asked to complete a demographic form, but otherwise the responses were anonymous.

2. Using the web-based program, for the brainstorming activity, participants were asked to complete the following focus statement by typing statements into a text box: **"To be ready to develop a system of care, the following specific characteristics and functions are essential to be in place before an application for funding can be completed."** The instructions indicated that the participants could enter 5-6 statements each. The group produced 275 statements. The investigators reviewed the content of these statements and separated statements that contained more than one idea, resulting in 336 statements. The 336 statements were then reviewed for duplication of ideas, resulting in 109 unique statements. The 109 statements are provided in Appendix A.

3. *Phase 2 (Organizing and Prioritizing Statements)*: This second part of the study was completed during the period of June 30 – August 17, 2008. Using the web-based program, the members of Group 1 were asked to rate the 109 statements according to their Importance and Difficulty of Implementation; and members of Group 2 were asked to sort the 109 statements into groups that go together and to provide their own labels for those groups. The reason that two groups were created was that the investigators thought that it was too much to ask the same people to do the ratings, which took 30 – 40 minutes, and the sorting, which took 45 minutes to one hour. Both groups were asked to complete the demographic form and both groups were asked to create an ID and password. They were told that they could choose an ID that would not reveal their identities but would allow them to leave the website and sign in again to return to their work.

   Ratings: The 109 statements were listed in two sets of ratings. Group 1 participants rated each of the 109 statements first on the dimension of Difficulty of Implementation and second on Importance. The ratings were based on a five-point scale with 1 indicating *very easy to implement* and 5 indicating *extremely difficult to implement* or 1 indicating *not at all important* and 5 indicating *extremely important*. This task took on average 30-40 minutes. Of the 155 people invited to participate in

[3] See footnote 2, above.

Group 1, 84 (54%) accepted and went to the website. Of these, 69 (84%) completed the first rating task and 65 (77%) completed the second rating task. The people in the group that completed the second ranking were the same people that completed the first ranking, except that four of them did not complete the task.

Sorting: Each participant was presented with a list of the 109 statements and was instructed to use a "drag and drop" method[4] of arranging the statements. Each sorted the statements by grouping them into piles of ideas that were similar to each other. The participants were asked to label the piles with names that described the statements that were contained in each of the piles. This task took on average 50-60 minutes. Of the 68 people invited to sort the statements into groups/domains, 39 (57%) participated and of those 39, 36 (92%) completed the sorting task.

The number of participants is quite good for this methodology, which is often used as an alternative to traditional focus group interview procedures; and focus groups may frequently involve fewer participants. Trochim (1993), in summarizing meta-analyses of 38 projects, reports an average of 14 sorters and raters in each project. As depicted in Table 1 below, the response rate of those invited compared with those that participated and those that finished the tasks is also good, given that the study was conducted during the summer vacation months and at the time of a major, week long national training institute. The main purpose of inviting a large number of people to participate was to offer the opportunity widely for people to express their views. As discussed below in the *Findings* section, the demographic characteristics of the study sample indicate good representation of parents and professionals from varying levels of employment, and there were responses from 25 of the 27 projects that were invited. The numbers exceed what Trochim (1993) indicates are required for a sound concept mapping study.

Table 1
Study Sample

Task	Invited	Participated	Completed Tasks
Brainstorming[5]	223[6]	135 (61%)	115 (85%)
Rating (Difficulty of Implementation)[7]	155	84 (57%)	69 (84%)
Rating (Importance)[8]	155	84 (57%)	65 (77%)
Sorting[9]	68	39 (57%)	36 (92%)

Findings

In this study, web-based concept mapping, as designed by Concept Systems, Inc. was a successful and cost-efficient technique for gathering information from a large group of people from across the country, in a short period of time.

[4] A different method, relying on a listing approach, was available for those with MacIntosh computers.
[5] Groups 1 and 2 combined.
[6] As Group 1 invitees forwarded invitations to others in their communities, there is no exact count of how many people were actually invited to respond to the tasks given to Group 1.
[7] Group 1
[8] Group 1
[9] Group 2

Demographics

For both phases of the study (Brainstorming and Sorting/Rating) participants were asked to complete a demographics form which covered four areas: age, gender, ethnic identity, and role in the system of care. Of the participants, 22% chose not to fill out the demographics form. Table 2 reflects the data from the other 78%. In the areas of age, gender, and ethnic identity, the respondents appear representative of field, for the most part. In the question relating to role in the system of care, the largest representation (28%) was in the category of "administrator." If the percent of respondents who are parents (4%) is combined with those who are parent coordinators (8%), the resulting 12% makes the parent representative among the next largest group.

Table 2
Demographic Summary

Gender	
Female	73.74%
Male	26.26%
	100.00%
Role in the System of Care	
Administrator	28.28%
Clinical supervisor	5.05%
Cultural and linguistic coordinator	4.04%
Other	11.11%
Outside expert (representative of an agency/ institution involved with multiple sites)	13.13%
Parent	4.04%
Parent coordinator	8.08%
Principal investigator	6.06%
Representative of community partner agency/service provider	3.03%
Social marketing coordinator	5.05%
Technical assistance coordinator	10.10%
Youth coordinator	2.02%
	100.00%
Age	
25-34	8.08%
35-44	22.22%
45-54	33.33%
55+	36.36%
	100.00%
Ethnic Identity	
African American/Black	13.13%
European American/White	67.68%
Hispanic/Latino	9.09%
Mixed	5.05%
Native American Indian/Alaska Native	5.05%
	100.00%

Results of the Sorting Process

The concept mapping analysis uses the data collected through the sorting task to determine the configuration of the clusters (domains) that form the concept map. Statistical analyses yield a visual configuration that displays the statements that were assembled together most often. The usual statistic reported in this type of analysis to indicate the goodness of fit of the configuration is called the stress value. A lower stress value indicates a better fit. In a study of the reliability of concept mapping, Trochim (1993) reported that the average stress value across 33 projects was .285 with a range from .155 to .352. The stress value in this analysis was .280, which is slightly better (i.e., lower) than average.

No mathematical criteria are available to select the appropriate number of clusters (categories/ domains). In the sorting process, the number of categories used by the participants ranged from 4 – 21, with the greatest frequency being 9 - 11 categories. The majority of participants (78%) used 11 categories or less; 22% used between 12 - 21 categories. The investigators began with the highest number of categories (21). Then, they examined successively merging clusters, making a judgment at each stage about whether the merger seemed to combine similar concepts and whether important discrete concepts were lost in the merger. The results of this examination yielded an eight cluster solution, as this provided the most discrete clusters of ideas that did not contain overlapping ideas. A comparison of seven, eight and nine cluster solutions is presented as Appendix C, with discussion of what is gained and what is lost with each version. Figure 1 shows the eight cluster solution, with cluster labels. The dots within each cluster represent the items that make up the cluster.

Guidelines for Interpreting the Cluster Map

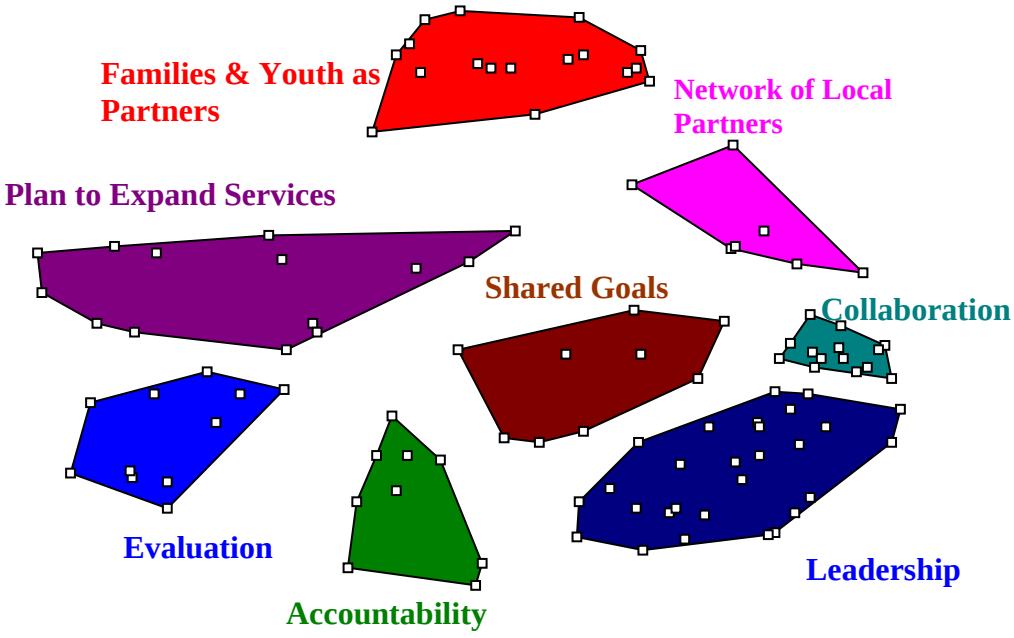
As described above, the statements generated in a brainstorming session are sorted by the participants and then the results of the sorting process are analyzed. The analysis produces a point map of the items first and then a cluster map. The point map shows the spatial relationship of the points, each of which represents a statement. Points closer to one another are those that are sorted together most often and should be similar in meaning. Those points far away from each are those not sorted together often and should not be conceptually similar. The point map shows the arrangement of statements in terms of proximity to each other. Boundaries are then put around statements that seem to form a common grouping, i.e., a cluster. The cluster map provides a more clearly defined picture of the relationship of the items, as they have been sorted (arranged) by the participants. The characteristics of the cluster map are:

- The location of points (statements) on a map is important in relation to other statements. Statements that are close to each other form clusters.
- The distance between statements is important, but placement at top, bottom, left, right is not relevant (you can flip the map in any direction).
- The relationship of clusters to one another is similar to the relationship of statements; i.e., those closer together are more closely related.
- The names of the clusters are based on the labels that the participants put on their groupings and are generated by statistical computation.
- In finding the themes of a map, it is helpful to consider how the clusters relate conceptually to one another.
- The size of a cluster does not indicate importance. A small dense cluster indicates that statements were grouped together often; a large spread out cluster may contain items that are related but not grouped together by a large number of participants.

- When ideas on a map are distinct, the statements may be clustered tightly together and away from other clusters on the map.
- A large cluster may indicate an idea that is broad or that the cluster bridges two related ideas.
- If a large cluster bridges two related clusters, the cluster will be positioned between the clusters it bridges.
- Clusters in the middle of a map are usually bridging clusters, meaning they include ideas that are linked to multiple regions on the map.
- Clusters that are conceptually clear end up on the edges of the map because participants often sort the statements in them together and sort them with other statements less often.

Appendix B provides more in-depth information about the development and interpretation of the cluster map.

Figure 1
Eight Cluster Solution



The clusters created by the participants are consistent with principles of the system of care policy promulgated by the Child and Family Branch of the Center for Mental Health Services; and the clusters created through sorting are similar to the concepts that are a part of technical assistance and training for system of care development. The clusters are similar to the common factors that Behar, Friedman & Lynn (2005) and Hodges et al (2007a, 2007b) identified in their review of systems of care sites. The current study builds on these earlier works and validates those findings by using measurable/quantifiable concepts. The Concept Systems methodology provides for statistical analyses of data, which is a step beyond the earlier studies. The earlier studies were based on summaries from interviews and observation and depended on the

investigators' determinations and judgments. The current study uses a "next generation" method and provides new information.

A study of the cluster map reveals that the central cluster, Shared Goals, is a bridging cluster in that it "holds together" or links the other clusters. According to this map, the other seven clusters are organized around the Shared Goals and it is the items in this cluster that bring the other clusters together. The items in this cluster include;

- There should be involvement of key budget staff to work with partners on funding issues, requirements, restrictions, and how to resolve the issues.
- There really has to be a felt need for services within the community by a variety of stakeholders.
- **There should be a clear plan, agreed to by the community partners, for expanding the array of services.**
- The community partners should have a clear understanding of how services are financed and their limitations on flexibility.
- The community must demonstrate that child serving agencies have been meeting regularly along with family/youth participation to review children with serious emotional disturbances in their community and in need of more intensive community resources.
- Develop a process to better understand the realities of each of the major stakeholders so system change can occur by devising win-win situations rather than relying on good will alone.
- All community partners have a clear understanding of the required investment, and similar expectations regarding the Return of Investment (ROI).
- There should be a clear understanding with local community organizations and municipalities of where the community is with a vision of where they want to be within a given period of time.
- The lay community needs to be made aware of the potential services in order to be willing to provide additional funding.

As an example to explain further, the third item listed above (bolded) is a complex statement that refers to a plan to expand services, agreement by the network of partners, and relates to collaboration and leadership. This item, as with others in this cluster, bridges the ideas that are placed in several of the other clusters.

The cluster map also shows that the clusters of Collaboration and Leadership are both densely populated with statements that are located very near each other. Collaboration is more tightly put together, meaning that these items are distinct and participants very often placed them together. On the other hand, the Leadership cluster suggests that many ideas (actions) came together as a broader set of ideas. In other words, there are more differing concepts in the Leadership cluster than in the Collaboration cluster, which has more similar ideas.

A bridging analysis indicates that these two clusters, Collaboration and Leadership, have the lowest bridging values of the eight clusters, which means that the items in these clusters were most frequently placed together and infrequently placed in other clusters. The scores for a bridging analysis range from 0 to 1.00. The average scores for these two clusters were each less that .25, with the average bridging value for Collaboration being .15 and for Leadership, .22.

The other cluster with a low average bridging value is Family and Youth as Partners (.28). A way to interpret these findings is that these are the "cleanest" clusters.

Also note that the Network of Partners cluster has items divided into two parts. Those items at the top of the cluster, closer to the Families & Youth as Partners cluster, involve network issues (with an emphasis on networks) and having families in the network; the items in the lower part involve network partners (with an emphasis on network partners) and issues of collaboration, which is the adjoining cluster.

Results of the Rating Process for Clusters

After the group completed the sorting process, they rated the statements on a five-point scale for Difficulty of Implementation and Importance. The average Difficulty of Implementation or Importance rating for a cluster is the average of the statements within the cluster. In other words, the clusters that contain more statements that have higher averages are the clusters that are rated as more important or harder to implement. Table 3 below shows the ratings of the clusters, in descending order, indicating the highest to the lowest average rating.

Table 3
Cluster Rating for Importance and Difficulty of Implementation[10]

Difficulty of Implementation		Importance	
Cluster	**Rating**	**Cluster**	**Rating**
Leadership	3.54	Network of Local Partners	4.32
Network of Local Partners	3.42	Collaboration	4.24
Shared Goals	3.30	Leadership	4.24
Collaboration	3.29	Families & Youth as Partners	4.14
Families & Youth as Partners	3.21	Accountability	4.03
Accountability	3.20	Plan to Expand Services	4.01
Evaluation	3.15	Shared Goals	3.99
Plan to Expand Services	3.11	Evaluation	3.99

Table 3 indicates that, in general, ratings for Difficulty of Implementation are lower than ratings for Importance. This finding is not unusual, as groups frequently rate their issues in this way, when they consider the efforts involved in accomplishing the tasks they consider important. It is the rankings, or the relative positions of the clusters, that provide useful information. The participants rated Leadership and Network of Local Partners as very important and also the most difficult to implement. On the other hand, they rated Plan to Expand Services and Evaluation as the least important and also the easiest to accomplish. Note that there is a small range for the rankings for Importance; essentially all clusters are considered to be important.

It is noteworthy that the Family & Youth as Partners cluster is rated moderately on Difficulty of Implementation, meaning that it is not seen as the most difficult to implement. The score of 3.21 (on a five-point scale) suggests that the participants see this as a fairly easy set of items to

[10] High ratings indicate that a cluster is most difficult to implement and most important.

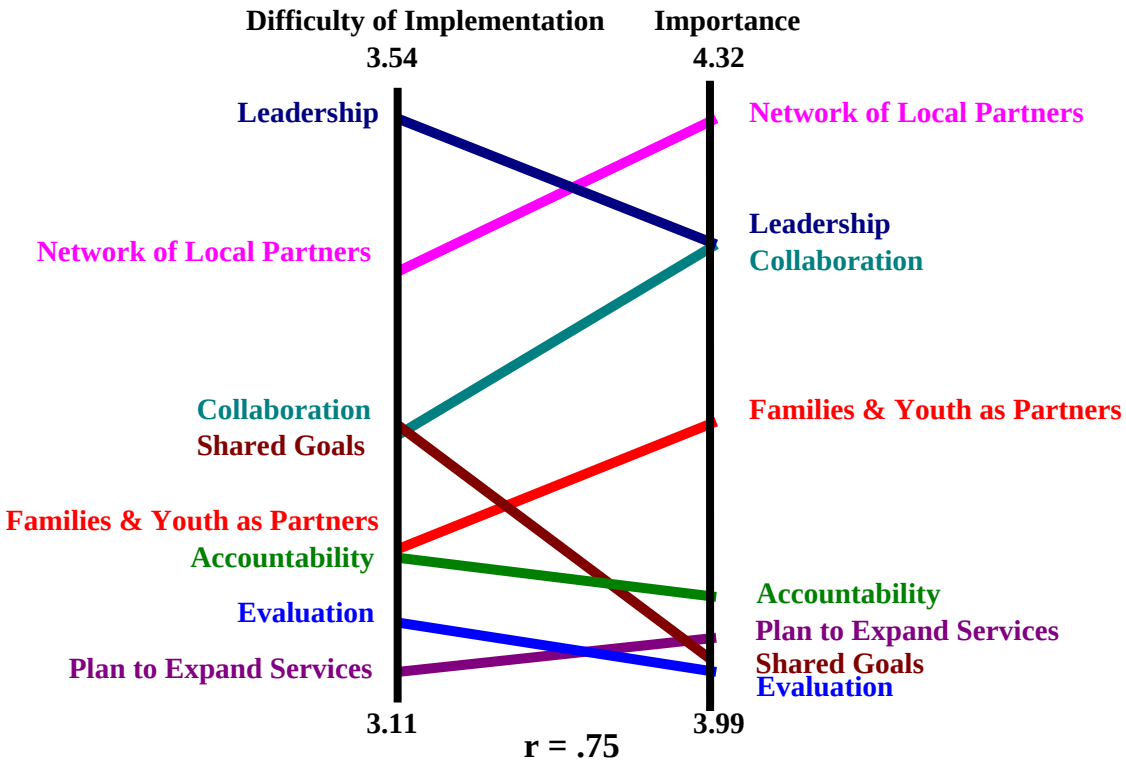
implement. Note that items related to family and youth are well integrated in other clusters, as reflected in the list of items in the Shared Goals cluster above, which includes, "The community must demonstrate that child serving agencies have been meeting regularly along with family/youth participation to review children with serious emotional disturbances in their community and in need of more intensive community resources." Overall, the information regarding the Family & Youth as Partners cluster conveys that family and youth are clearly a part of the overall design of systems of care and their involvement is not seen as something difficult to achieve. This position may be interpreted to reflect real progress on family and youth participation in systems of care.

This same information concerning the agreement between the ratings of Difficulty of Implementation and Importance can also be presented using a consensus pattern match (ladder graph), which is generated based on correlations between the two dimensions. The ladder graph compares the participant responses of each of the two dimensions, Difficulty of Implementation and Importance. The relationship between the two dimensions is represented by a correlation coefficient, which ranges from -1.00 to +1.00, with negative numbers indicating degrees of disagreement and positive numbers indicating degrees of agreement.

The ladder graph in Figure 2 offers a pictorial display of the information in Table 3. The level of agreement between the two dimensions is +.75, meaning that the participants had 75% agreement in their ratings of items for Difficulty of Implementation and Importance. Perfect agreement would be +1.00 or 100%, meaning that the average rating for every item on Difficulty of Implementation was exactly the same as the average rating for Importance. A rating of +.75 is considered to be positive.

The Concept Systems method of data presentation in the ladder graph allows for using different scales on either side of the ladder, as there are systematic differences in how the two dimensions are rated, so each has its own scale. In examining the slopes on the ladder graph, there are four clusters that slope upward. These clusters are Network of Local Partners, Collaboration, Families & Youth as Partners, and Plan to Expand Services. The slope of four clusters upward indicates that the action steps in these clusters were rated as more important than difficult to implement. There are four clusters that slope downward, although some only slightly. These clusters are Leadership, Accountability, Shared Goals, and Evaluation. The slope of four clusters downward indicates that the items in these clusters were rated as more difficult to implement than important. The steeper the slopes per cluster, the greater the discrepancy between the two dimensions. The higher scores, i.e., placement higher on the graph, indicate more difficulty or more importance.

Figure 2
Comparison of the Clusters [11]

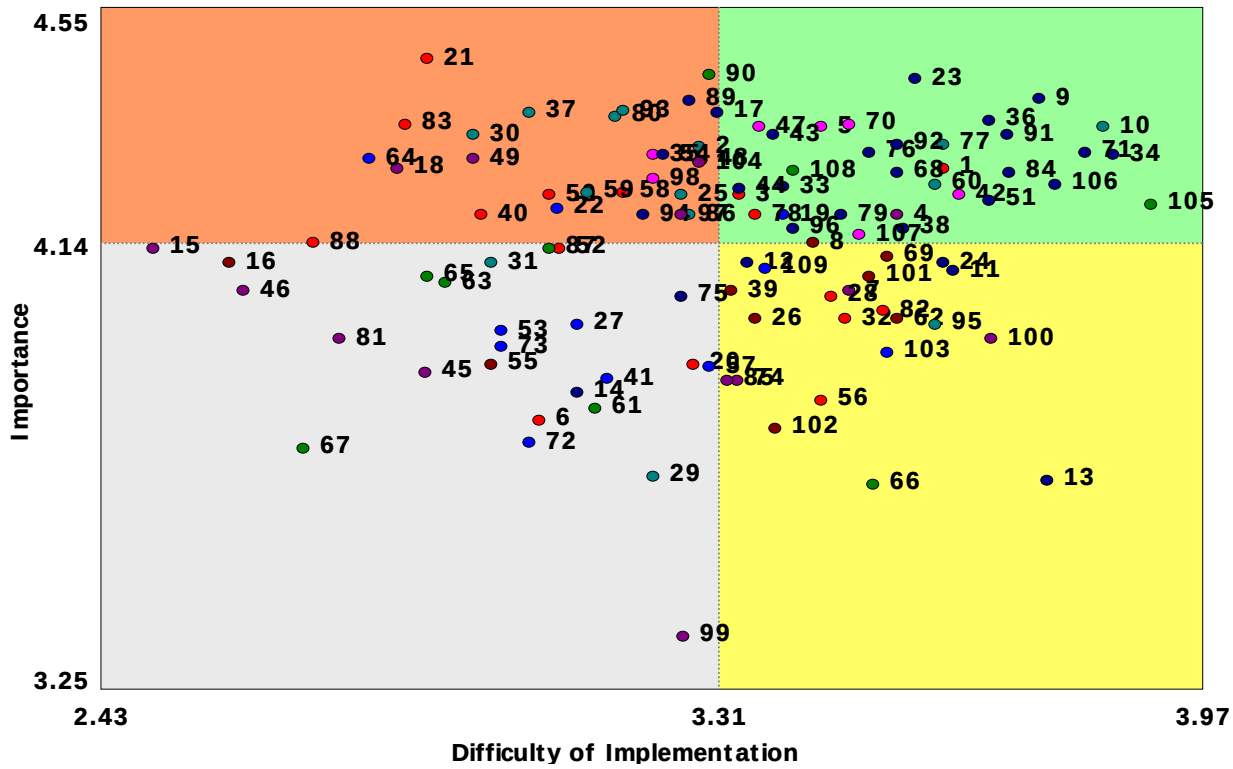


Results of the Rating Process for Items
The 109 statements generated in the brainstorming session were rated on a five-point scale for Importance and Difficulty of Implementation. The statements receiving high ratings on Importance reflect the priorities for action, that is, what are the most important next steps. However, if the concept of difficulty of implementation is also considered, the priorities for focusing action are changed, as they are tempered by what will require more effort. **The areas that would be most essential to pursue, that is, the areas that will require the most attention and effort are those judged both important and difficult to implement.**

A way to depict the most important and most difficult next steps is to employ a "focus zone" map as shown in Figure 3. This method of mapping divides the items into four quadrants and displays the relationship between Importance and Difficulty of Implementation by showing the placement of items in each of the four quadrants. The quadrants are described in the Graph Key below Figure 3. The upper right quadrant, the green zone, is considered the major "focus zone." The items in this quadrant are those that the participants considered to be most important yet the most difficult to implement. These are the items that will require the most attention in preparing the community to implement a system of care.

[11] The scales for the two sides of the ladder graph are purposely unequal because there is a systematic difference in the ratings on the two dimensions. This displayed inequality allows for better visual comparisons of the relationship between the dimensions.

Figure 3
Plot of Focus Zones



Graph Key

Low Importance & Low Difficulty of Implementation (Easiest)	Gray
High Importance & Low Difficulty of Implementation (Easiest)	Orange
Low Importance & High Difficulty of Implementation (Hardest)	Yellow
High Importance & High Difficulty of Implementation (Hardest)	Green

A non-pictorial way of presenting the focus zone information is to present the most highly rated statements for the two dimensions, Difficulty of Implementation and Importance. These are the statements in the upper right that is, the green quadrant. There are numerous statements in this quadrant; only the most highly rated on both dimensions will be addressed.

To summarize the process, through the brainstorming process, all the participants identified 109 action steps. Through the rating process, using a five-point scale, Group 1 participants indicated the steps that they thought were the most important and the most difficult to implement for developing a system of care. These statements that reflect what is most important and most difficult to implement translate into action steps for a community to develop a system of care. **When these two lists of items are combined statistically, the result is the action steps that reflect what is most important and most difficult to implement and thus represent the important areas in which to concentrate efforts.** In reviewing the statements, there appears to be a slight break at the rating of the top eight statements for the combined scores of Difficulty of Implementation and Importance; this list actually includes nine statements because of one tied ranking. These statements are presented in Table 4 below.

Table 4
Eight[12] Highest Statements Rated for Both Difficulty of Implementation and Importance[13]

#[14]	Statement	Combined Rating	Rank
10	The community partners have a willingness to share resources: knowledge, staff, dollars, understanding that it is through joint investment that joint success is achieved.	4.15	1
1	The concept of permanent system change needs to be understood and accepted as the end goal.	4.13	2
34	There must be a commitment from state and local policy makers and funders of services to participate in developing a viable system of care and revamping how services are provided and funded.	4.12	3
71	State and/or county support is needed - not only to support the proposed service delivery changes, but to support/allow flexibility for larger system change initiatives (proposed changes in funding structure, for example).	4.11	4
91	Leaders should be willing to be challenged and are able to experience discomfort when it comes to movement and change.	4.07	5
36	There should be a commitment by the leadership of the community partners in the form of designated funding (match), staffing resources, or track record implementing initiatives that share core SOC values and principles.	4.07	5
23	It is important to have a real commitment to the effort from key community stakeholders - people with the ability to influence attitudes and actions of others such as elected officials, community champions, respected individuals, etc.	4.06	6
106	A well developed understanding by the state level personnel with decision making authority is absolutely necessary.	4.04	7
84	Agreements between the state and local agencies need to be in place so that changes in administrations midway through the 6 years of funding don't derail the momentum and progress of the project.	4.02	8

Viewing these dimensions separately, there is a break in the rankings at nine statements. The top nine statements for Difficulty of Implementation include 12 statements, shown in Table 5; and the top nine statements for Importance include 15 statements, because of tied rankings (Table 6). Table 4 above shows those items that were rated highly on Difficulty of Implementation and Importance combined, as the most difficult and the most important. Table 5 presents a slightly different list, that of the items rated as most difficult to implement without taking the rating for importance into consideration. Table 6 presents the items rated for their importance in implementing a system of care. Note that it is usually the case that the Importance ratings are on average higher than any other ratings, in this case, Difficulty of Implementation.

[12] Nine statements are presented because there are 2 statements tied at rank #5.
[13] These statements reflect actions that are both more important and more difficult to implement than the other statements.
[14] The # reflects the statement number, that is, the sequence of items generated during the brainstorming session.

It might be useful for communities that wish to improve their readiness to focus on the most important steps, regardless of their rated difficulty, thus doing those that are rated to be both easy and difficult, but clearly most important.

Table 5
Nine[15] Highest Statements Rated for Difficulty of Implementation[16] Separately

#[17]	Statement	Rating	Rank
105	There should be an understanding of blended or braided funding and the willingness among the community agencies to share resources.	3.97	1
34	There must be a commitment from state and local policy makers and funders of services to participate in developing a viable system of care and revamping how services are provided and funded.	3.91	2
10	The community partners have a willingness to share resources: knowledge, staff, dollars, understanding that it is through joint investment that joint success is achieved.	3.90	3
71	State and/or county support is needed - not only to support the proposed service delivery changes, but to support/allow flexibility for larger system change initiatives (proposed changes in funding structure, for example).	3.87	4
106	A well developed understanding by the state level personnel with decision making authority is absolutely necessary.	3.82	5
13	There needs to be strong inclusion of elected officials on the local and state level.	3.81	6
9	The concept of permanent system change needs to be understood and accepted as the end goal.	3.80	7
84	Agreements between the state and local agencies need to be in place so that changes in administrations midway through the 6 years of funding don't derail the momentum and progress of the project.	3.75	8
91	Leaders should be willing to be challenged and are able to experience discomfort when it comes to movement and change.	3.75	8
100	The community should dedicate sufficient resources to support cultural and linguistic proficiency.	3.72	9
36	There should be a commitment by the leadership of the community partners in the form of designated funding (match), staffing resources, or track record implementing initiatives that share core SOC values and principles.	3.72	9
51	There must be buy-in at the state level.	3.72	9

[15] 12 statements are presented because there are 2 statements tied at rank #8 and 3 statements tied at rank #9.
[16] High ratings indicate highly important and most difficult to implement.
[17] The # reflects the statement number, that is, the sequence of items generated during the brainstorming session.

Table 6
Nine[18] Highest Statements Rated for Importance Separately

#[19]	Statement	Rating	Rank
21	There should be input from youth and families to determine the needs in the community.	4.55	1
90	It needs to be understood that sustainability of services developed should be part of the discussions beginning in the 1st year not waiting until the end.	4.52	2
23	It is important to have a real commitment to the effort from key community stakeholders - people with the ability to influence attitudes and actions of others such as elected officials, community champions, respected individuals, etc.	4.51	3
9	The concept of permanent system change needs to be understood and accepted as the end goal.	4.46	4
89	There must be a commitment from policy makers, community leaders, partners, and staff to the system of care values and principles	4.46	4
93	There is willingness to work in a fair, inclusive and open manner.	4.44	5
17	The community needs to understand that the cooperative agreement is not primarily a granting of money, but is a partnership with the federal government to accomplish the federal program goals.	4.43	6
37	There must be strong relationships and commitment to collaboration among community partners.	4.43	6
80	The participants at the planning stage must include parents, providers, advocates, local funders, youth, educators, local leaders, and all those who will be a part of the system of care.	4.42	7
36	There should be a commitment by the leadership of the community partners in the form of designated funding (match), staffing resources, or track record implementing initiatives that share core SOC values and principles.	4.42	7
70	A commitment from leadership at major child serving systems to a family-driven, youth-guided care system of care (SOC) is essential to success.	4.41	8
83	Families have been at the table throughout the visioning process.	4.41	8
5	Make sure everyone--community partners, leaders, families, and youth--understand the principles on which the new system will be built and share them, share the same values.	4.40	9
10	The community partners have a willingness to share resources: knowledge, staff, dollars, understanding that it is through joint investment that joint success is achieved.	4.40	9
47	There should be active participation from families, youth and front-line workers from public and private sectors in the implementation of the system.	4.40	9

[18] 15 statements are presented because there are 2 statements tied at rank #4, 2 at rank #6, 2 at rank #7, and 2 statements at rank #9.
[19] The # reflects the statement number, that is, the sequence of items generated during the brainstorming session.

In addition to determining those steps that are the most important and most difficult to implement overall, each cluster can be examined to determine the statements within that cluster with the highest ratings for Importance and Difficulty of Implementation. Table 7 presents the top three items on these dimensions per cluster, that is, 24 of the 109 statements or 22% of all the statements. This presentation will allow for a focus on action steps by cluster (domain).

Table 7
Highest Three Statements per Cluster
by Difficulty of Implementation and Importance[20]

Cluster 1: Families & Youth as Partners

- Families are provided with support and training so that they can participate fully and comfortably in system of care planning, implementation, oversight, and evaluation.
- There needs to be training and support to help teach and educate families and professionals how to work together and respect and value each other's expertise.
- Families are willing to take on a lead role in taking vision to reality.

Cluster 2: Plan to Expand Services

- It is important to have well trained culturally competent flexible personnel.
- The community should dedicate sufficient resources to support cultural and linguistic proficiency.
- Communities need to be provided with training and/or examples of what following the values and principles of the system of care might look like to see what a shift in thinking and practice it really is from how they currently serve children and families.

Cluster 3: Evaluation

- The applicant should fully understand the magnitude of the evaluation component and the importance of data driven services.
- Develop a method of sharing real time useful information to identify important system trends and to provide the requisite information for data based decision making.
- There needs to be an understanding of and buy-in of the use of the research to help address what is working and what can be improved at in the community.

Cluster 4: Collaboration

- The community partners have a willingness to share resources: knowledge, staff, dollars, understanding that it is through joint investment that joint success is achieved.
- There needs to be a strong trusting working relationship among all collaborating parties.
- Partners essential to the system of care must be fully on board and officially on board.

[20] High ratings indicate that a statement is highly important and most difficult to implement.

Cluster 5: Network of Local Partners

- All community partners must work collaboratively to include strong parental engagement, blended and flexible funding, and shared success and liability.
- An advisory or leadership board should be established that has at least 1/3 parent participation and they should have input on the writing of the proposal.
- Make sure everyone--community partners, leaders, families, youth--understand the principles on which the new system will be built and share them, share the same values.

Cluster 6: Shared Goals

- All community partners have a clear understanding of the required investment, and similar expectations regarding the Return of Investment (ROI).
- There should be involvement of key budget staff to work with partners on funding issues, requirements, restrictions, and how to resolve the issues
- Develop a process to better understand the realities of each of the major stakeholders so system change can occur by devising win-win situations rather than relying on good will alone.

Cluster 7: Accountability

- There should be an understanding of blended or braided funding and the willingness among the community agencies to share resources.
- It needs to be understood that sustainability of services developed should be part of the discussions beginning in the 1st year not waiting until the end.
- There should be an agreement to share information across child-serving systems.

Cluster 8: Leadership

- The concept of permanent system change needs to be understood and accepted as the end goal.
- There must be a commitment from state and local policy makers and funders of services to participate in developing a viable system of care and revamping how services are provided and funded.
- State and/or county support is needed - not only to support the proposed service delivery changes, but to support/allow flexibility for larger system change initiatives (proposed changes in funding structure, for example).

Additional Benefits of the Study

In addition to providing substantial insight into the concept of community readiness, the list of action statements created by the participants that became the rating scale for the readiness study now provides a basis for community assessment. A product of the study is a score-able rating scale that can be compared to the standard created by the study. This statistically-based assessment strategy will allow a large number of community stakeholders to rate their own readiness to develop a system of care, whether they are in the pre-application stage or in the stage of being newly funded and in the planning phase. In either case, the community assessment could be done using a web-based approach or in an assembled group. However, using a face-to-face group meeting has the added advantage of actively engaging the community partners in the group process of the assessing/planning task.

Once the community stakeholders assess their readiness, the resulting information of their strengths and weaknesses should provide direction for their implementation efforts. A follow-up rating after 10-12 months, using the same rating scale, would reflect their progress in addressing areas of weakness.

The list of action statements also provides a basis for assessing an application for funding, giving the reviewers a rating scale to apply to the application.

Summary

Meeting a Need, Expanding the Knowledge Base

As the conceptual framework for the system of care has evolved, policy guidance, technical assistance, and training have focused on more refined factors related to the successful development. It has become clear that much effort must be devoted to community transformation, focusing on community partnerships, families and youth as equal participants, individualized care, and culturally responsive services. Establishing these new principles and practices in the broader community is not easy, but important to the success and sustainability of the program.

The concept of "community readiness" offers an important contribution to improving the planning and implementation process for communities. Being able to understand from the very beginning what factors are important to the successful implementation of a system of care would help communities assess their own strengths and weaknesses and address the areas of weakness. Further, such understanding could support efforts of the Technical Assistance Partnership for Child and Family Mental Health, a collaboration between the American Institutes for Research and the National Federation of Families for Children's Mental Health, to better determine areas of focus for their technical assistance to the sites.

There is some, but not much information about the concept of readiness related to systems of care for children with emotional disturbances and their families. Thus, this current study augments earlier work to fill an important gap in knowledge.

A Well Researched, Statistically Based Method of Study

Concept mapping is a mixed-methods planning and evaluation approach that integrates familiar qualitative group processes (brainstorming, and sorting and rating of statements) with multivariate statistical analyses to help a group describe its ideas on any topic of interest and represent these ideas graphically through maps. The process typically requires the participants to brainstorm a large set of statements relevant to the topic of interest, individually sort these statements into piles of similar ones, and rate each statement on one or more dimensions. Concept Systems, Inc. has developed a research-based methodology to analyze the data obtained. This approach is a "next generation" tool that uses sound methods of analysis of the data gathered, so that the end result is an unbiased and fair description of the input of the participants. In this study, web-based concept mapping, as designed by Concept Systems, Inc. was a successful and cost-efficient technique for gathering information from a large group of people from across the country, in a short period of time.

The current study builds on earlier works and validates those findings by using measurable/ quantifiable concepts. Statistical analyses of data provide a "next generation" approach and go beyond the earlier information which essentially was based on summaries from interviews and observation. Thus, the current study provides more new and useful information to understand and to assess community readiness.

A Representative Sample of Participants

Two groups, totaling approximately 223, were invited to participate in this project.

1. The first group consisted of grant communities in their 5th and 6th year of funding from the Center from Mental Health Services, Child, Adolescent and Family Branch. Invitations to participate were sent to 27 sites, including three tribal communities. Those invited included project directors, principal investigators, clinical directors, lead family coordinators, youth coordinators, cultural and linguistic coordinators, technical assistance coordinators, social marketers (N = 155). The invitations were sent by e-mail from the Deputy Project Director of the Technical Assistance Partnership, American Institutes for Research.. Those invited were asked to forward the invitations to others in their communities, to include parents, agency partners, community leaders, and others that they considered relevant. Additionally, a widespread invitation was issued through the "alumni network," which served to encourage participation.
2. For the second group, a panel of national experts was selected by the investigators. The panel of experts included people from graduated sites and those who have served as consultants, evaluators, trainers, and leaders in the design and development of systems of care (N = 74). Invitations were sent by the investigators directly.

Procedure

Using the Concept Systems, Inc. web-based CS Global© system, input about indicators of community readiness were obtained from the participants described above. Participants' input was accomplished in two phases. Phase 1, called brainstorming, and involved generating a list of community and systems factors. Phase 2 consisted of organizing those factors (sorting) and rating them for Importance and Difficulty of Implementation (rating). The Concept Systems, Inc. computer software version 4.147 was used to perform all analyses and produce all of the maps and statistical results.

1. *Phase 1 (Generating Statements)*: Members of Group 1 and 2 combined were asked to participate. Of the approximately 223 people invited from both groups, 135 (61%) participated and 115 (85%) completed the task. All participants were asked to complete a demographic form, but otherwise the responses were anonymous.

   Using the web-based program, for the brainstorming activity, participants were asked to complete the following focus statement by typing statements into a text box: **"To be ready to develop a system of care, the following specific characteristics and functions are essential to be in place before an application for funding can be completed."** The group produced 275 statements. The investigators reviewed the content of these statements and separated statements that contained more than one idea, resulting in 336 statements. The 336 statements were then reviewed for duplication of ideas, resulting in 109 unique statements.

2. *Phase 2 (Organizing and Prioritizing Statements)*: Using the web-based program, the members of Group 1 were asked to rate the 109 statements in terms of Importance and Difficulty of Implementation; and members of Group 2 were asked to sort the 109 statements into groups that go together and to provide their own labels for those groups.
    - *Ratings*. The 109 statements were listed in two sets of ratings. Group 1 participants rated each of the 109 statements first on the dimension of Difficulty of Implementation and second on Importance. The ratings were based on a five-point scale with 1 *indicating very easy to implement* and 5 indicating *extremely difficult to implement* or 1 indicating or *not at all important* and 5 indicating *extremely important*. Of the 155 people invited to participate in Group 1, 84 (54%) accepted and went to the website. Of these, 69 (84%) completed the first rating task and 65 (77%) completed the second rating task.
    - *Sorting*. Each participant was presented with a list of the 109 statements and was instructed to group the statements into piles of ideas that were similar to each other. The participants were asked to label the piles with names that described the statements that were contained in each of the piles. Of the 72 people invited to sort the statements into groups/domains, 39 (54%) participated and of those 39, 36 (92%) completed the sorting task.

Findings

Sorting

The results of the sorting process yielded eight clusters, as this provided the most discrete clusters of ideas that did not contain overlapping ideas. The clusters are: Family & Youth as Partners, Plan to Expand Services, Evaluation, Collaboration, Network of Local Partners, Shared Goals, Accountability, and Leadership. These clusters are consistent with system of care principles and policy promulgated by the Child and Family Branch of the Center for Mental Health Services. The clusters created through sorting are similar to the concepts that are a part of technical assistance and training for system of care development. The clusters are similar to the common factors that others have identified in reviews of systems of care sites. The current study builds on these earlier works, validates through statistical analyses of data earlier information derived from interviews and observation, and provides more new information about community readiness.

Rating

The rating of items for Difficulty of Implementation and for Importance yielded new information, as the dimension of Difficulty of Implementation had not been addressed formally. The ratings of the 109 statements on these two dimensions yielded scores for each item as to the level of importance and the level of difficulty to implement. The practical implication of these ratings is that communities can understand where the greatest amount of effort should be expended—on those actions that are most important and most difficult to implement. As an example, the three statements with the highest rating on these two dimensions are:

1. The community partners have a willingness to share resources: knowledge, staff, dollars, understanding that it is through joint investment that joint success is achieved.
2. The concept of permanent system change needs to be understood and accepted as the end goal.

3. There must be a commitment from state and local policy makers and funders of services to participate in developing a viable system of care and revamping how services are provided and funded.

In addition to presenting the ratings for all statements on the two dimensions, ratings are also presented within each cluster. Thus, for each of the eight clusters, the statements rated as the most important and most difficult (combined) are presented, allowing for a focused effort on these action steps, by domain.

Family & Youth Issues
Although there was a specific cluster labeled *Family & Youth as Partners,* this cluster was rated the fourth most important and the fifth most difficult to implement, meaning that it was in the middle for both dimensions. Items pertaining to family and youth permeated the other clusters, as well. Overall, the information regarding the Family & Youth as Partners cluster conveys that family and youth are clearly a part of the overall design of systems of care and their involvement is not seen as something difficult to achieve. This position may be interpreted to reflect real progress on family and youth participation in systems of care.

Useful Guidance and a Way to Assess Communities
The findings of the study can be useful to communities as they plan to develop systems of care, whether they are at the stage of writing an application for funding or in the early stages of implementation. The clusters that resulted from the study define the domains/factors where efforts should be made. Within those domains, there are specific action steps (statements) that guide what needs to be done. The action steps are rated for how important they are to the successful implementation of a system of care. The action steps are also rated for how difficult they are to implement.

The list of action statements provides a basis for community assessment. This statistically-based assessment strategy will allow a large number of community stakeholders to quickly rate their own readiness to develop a system of care, whether they are in the pre-application stage or in the stage of being funded and in the planning phase. The input can be statistically analyzed quickly to provide a status report on a community's readiness. This assessment of the community can be done face-to-face in a group or individually via a web-based program. However, using a face-to-face group meeting has the added advantage of actively engaging the community partners in the group process of the assessing/planning task.

Once the community stakeholders assess their readiness, the resulting information of their strengths and weaknesses should provide direction for their implementation efforts. A follow-up rating after 10-12 months, using the same rating scale, would reflect their progress in addressing areas of weakness.

The list of action statements also provides a sound basis for assessing an application for funding, giving the reviewers a rating scale to apply to the application.

References

Behar, L.B. (1985). Changing patterns of state responsibility: A case study of North Carolina. *Journal of Clinical Child Psychology, 14*(3), 188-195.

Behar, L.B. (2002). Children's mental health services: The challenge of changing policy and practice. In William Reid and Stuart Silver (Eds.) *Handbook of mental health administration and management*. New York, NY: Brunner-Routledge, pp. 149-162.

Behar, L., Friedman, R., Lynn, N. (2005). A study of service innovations that enhance systems of care. *Selected readings in systems of care.* Tampa, FL: The Research & Training Center for Children's Mental Health, University of South Florida.

Comprehensive Community Mental Health Services Program for Children and Their Families (2006). Child, Adolescent and Family Branch, the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. *The Comprehensive Community Mental Health Services Program for Children and Their Families*. Available at http://www.mentalhealth.samhsa.gov/cmhs/ChildrensCampaign/grantcomm.asp

Concept Systems. (2006). *The concept system*, version 4.118. Ithaca, NY: Concept Systems Incorporated. Available at http://www.conceptsystems.com

Edwards, R. W., Jumper-Thurman. P., Plested, B. A., Oetting, E. R., & Swanson, L. (2000). Community readiness: Research to practice. *Journal of Community Psychology, 28*(3), 291-307

Friedman, R. (2005a). *Effective systems of care: A summary of implementation factors*. Available from http://rtckids.fmhi.usf.edu/publications.html

Friedman, R. (2005b). *Transformation work group report.* Available from http://rtckids.fmhi.usf.edu/publications.html

Greene, J.C., & Caracelli, V.J. (Eds.) (1997). *Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms. New directions for program evaluation (Vol. 74).* San Francisco: Jossey-Bass.

Hodges, S, Ferreira, K, Israel, N., & Mazza, J. (2007a, January). *Lessons from successful systems*. Available from http://rtckids.fmhi.usf.edu/publications.html

Hodges, S, Ferreira, K, Israel, N., & Mazza, J. (2007b, February). *Locally identified factors for systems implementation*. Available from http://rtckids.fmhi.usf.edu/publications.html

Joint Commission on Mental Health of Children, Inc. (1969). *Crisis in child mental health: Challenge for the 1970's*. New York, NY: Harper & Row.

Kane, M. & Trochim, W.M.K. (2007). *Concept mapping for planning and evaluation.* Thousand Oaks, CA: Sage Publications.

Knitzer, J. (1982). *Unclaimed children.* Children's Defense Fund, Washington, DC.

Lourie, I. S. (2002). A history of community child mental health. In A.J. Pumariega & N.C. Winters (Eds.). *The handbook of child and adolescent systems of care.* (pp.1-17), San Francisco, CA: Jossey-Bass.

Manteuffel, B., Stephens, R.L., & Santiago, R. (2002). Overview of the national evaluation of the Comprehensive Community Mental Health Services for Children and their Families Program and summary of current findings. *Children's Services: Social Policy, Research, and Practice* 5(1): 3-20.

Manteuffel, B., Katana, P., Petrila, A., Rosales-Elkins, D., & Stroul, B. (2006, July). *Effective strategies for sustaining systems of care: Lessons learned*. Presented at the National Training Institutes, Orlando, FL.

New Freedom Commission on Mental Health. (2003). *Achieving the promise: transforming mental health care in America. Final report*. Department of Health and Human Services, Rockville, MD.

North Carolina Aging and Disability Resource Connections (2008). *Community readiness assessment tool*. Raleigh, NC: North Carolina Department of Health and Human Services.

Novak, J.D. (1998).The nature of knowledge and how humans create knowledge. in J.D.Novak (Ed.) *Learning, creating, and using knowledge: concept maps as facilitative tools in schools and corporations.* (pp.79-11). Lawrence Erlbaum Associates.

Osher, T. W., & Huff, B (2007, October). *Family driven care and practice system self assessment tool*. Presentation to the Colorado House Joint Resolution 07-1050 Task Force, Denver, CO.

Rosas, S. (2008, March). *Concept mapping and scale development*. Presentation to Concept Systems Research Association. Ithaca, NY.

Stroul, B., & Friedman, R.M., (1986). *A system of care for children and youth with severe emotional disturbances.* Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center.

Stroul, B., & Friedman, R.M., (1996). *A system of care for children and youth with severe emotional disturbances (Revised. edition).* Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center.

Stroul, B., & Friedman, R. (1996). The system of care concept and philosophy. In B. Stroul (Ed.) *Children's mental health: Creating systems of care in a changing society* (pp. 3-21). Baltimore: Paul H. Brookes.

Trochim, W. (1989a). An introduction to concept mapping for planning and evaluation. *Evaluation and Program Planning*, *12*, 1-16.

Trochim, W. (1989b). Concept mapping: Soft science or hard art? *Evaluation and Program Planning*, *12*, 87-110.

Trochim, W., & Linton, R. (1986). Conceptualization for evaluation and planning. *Evaluation and Program Planning*, *9*, 289308.

Trochim, W. (1993, November). *Reliability of concept mapping*. Presented at the annual conference of the American Evaluation Association, Dallas, TX.

Trochim, W., Milstein, B., Wood, B.J., Jackson, S., & Pressler, V. (2003). Setting objectives for community and systems change: an application of concept mapping for planning a statewide health improvement initiative. *Health Promotion Practice*, *8*, 1-12

U.S. Department of Health and Human Services. (1999). *Mental Health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.

APPENDICES

APPENDIX A

Statement List

Statement List

1 Families are provided with support and training so that they can participate fully and comfortably in system of care planning, implementation oversight, and evaluation.
2 The collaborative should be actively involved/committed in developing the application approach/strategies/goals/outcomes.
3 There needs to be training and support to help teach and educate families and professionals how to work together and respect and value each other's expertise.
4 It is important to have well trained culturally competent flexible personnel.
5 Make sure everyone--community partners, leaders, families, youth--understand the principles on which the new system will be built and share them, share the same values.
6 Key family contacts and youth leaders should be identified prior to the application submission so that the groups are ready to roll once the funding is received.
7 Communities need to be provided with training and/or examples of what following the values and principles of the system of care might look like to see what a shift in thinking and practice it really is from how they currently serve children and families.
8 There should be involvement of key budget staff to work with partners on funding issues, requirements, restrictions, and how to resolve the issues.
9 The concept of permanent system change needs to be understood and accepted as the end goal.
10 The community partners have a willingness to share resources: knowledge, staff, dollars, understanding that it is through joint investment that joint success is achieved.
11 There needs to be a strong relationship between the state and the local community receiving the funding.
12 There should be clearly defined decision-making processes and communication pathways across stakeholders
13 There needs to be strong inclusion of elected officials on the local and state level.
14 Established relationships among entities to be involved in the system and guidelines for these relationships are essential pre-work.
15 The community should identify a clear population of initial focus for its system transformation efforts.
16 There really has to be a felt need for services within the community by a variety of stakeholders.
17 The community needs to understand that the cooperative agreement is not primarily a granting of money, but is a partnership with the federal government to accomplish the federal program goals.
18 There should be a clear understanding of the project's target population and changes that will be needed to meet the service needs of this population.
19 The applicant should fully understand the magnitude of the evaluation component and the importance of data driven services.
20 Provide youth with a decent budget for skill building activities.
21 There should be input from youth and families to determine the needs in the community.

22 There must be commitment to evaluation and data based decision making.
23 It is important to have a real commitment to the effort from key community stakeholders - people with the ability to influence attitudes and actions of others such as elected officials, community champions, respected individuals.
24 A well developed understanding by the state level personnel with decision making authority is ABSOLUTELY necessary.
25 The community partners should have a vision of what is the specific contribution of their collaboration.
26 There should be a clear plan, agreed to by the community partners, for expanding the array of services.
27 Cultural agents should be involved from the early planning stages forward.
28 There must be a strong family organization with resources to actively participate.
29 Community organizations such as faith based groups should be at the table in the application process.
30 There must be committed community stakeholders which include child-serving systems, providers, families, youth and community members.
31 There needs to be a strong collaborative group of service providers already engaged in discussion about mutual goals.
32 Provide young people with support and training so that they can participate fully and comfortably in system of care planning, implementation oversight, and evaluation.
33 There should be a commitment from partnering agencies about what exactly they will provide to this process.
34 There must be a commitment from state and local policy makers and funders of services to participate in developing a viable system of care and revamping how services are provided and funded.
35 All partners should have a sense of community identification and buy in to the System of Care mission and principles.
36 There should be a commitment by the leadership of the community partners in the form of designated funding (match), staffing resources, or track record implementing initiatives that share core SOC values and principles.
37 There must be strong relationships and commitment to collaboration among community partners.
38 Applicants should be able to demonstrate cross-system cooperation/decision-making as well as "vertical" intra-agency cooperation/decision-making. (top-down, bottom-up).
39 The community partners should have a clear understanding of how services are financed and their limitations on flexibility
40 The community must show specific ways that family members and youth participate in decision-making for their individual service plans.
41 There should be an analysis about the service components that will require more support to reduce the problems.
42 All community partners must work collaboratively to include strong parental engagement, blended and flexible funding, and shared success and liability.
43 The project leaders should have the ability to bring resources to the table or leverage resources (not necessarily money but human capital, political will, etc.).
44 Leadership sharing should be clearly defined.

45 There must be intent to provide training in and utilization of specific evidence-based practices with justification based on clinical characteristics of target population.
46 A part of the preparation needs to be educating all those participating in the "big picture" about the history of the System of Care, other communities work, and the effectiveness of a successful system of care.
47 There should be active participation from families, youth and front-line workers from public and private sectors in the implementation of the system.
48 Find youth and family members who are able to articulate and to advocate, with support and training, if necessary, to use their stories and voice.
49 To ensure adequate staffing, there should be a realistic plan to hire and train new staff in a timely manner.
50 Provide training in advocacy, leadership, and meeting etiquette to parents to help them feel more confident advocating for themselves and others in the community.
51 There must be buy-in at the state level.
52 There should be a dedicated amount in budget to go to the family organization.
53 There has to be a comprehensive assessment within the community of where the gaps are in terms of resources and needs.
54 There should be a core committed group with strong leadership that couples vision with concrete strategy and practical know-how.
55 The community must demonstrate that child serving agencies have been meeting regularly along with family/ youth participation to review children with serious emotional disturbances in their community and in need of more intensive community resources.
56 Begin to develop family organization before funding.
57 The community partners should have a commitment to ongoing evidence-based practice with fidelity monitoring and feedback.
58 The community must show that family members and youth are active members of a community system of care initiative.
59 The community partners must include the child serving agency stakeholders that have bought into the systems of care and wraparound concept
60 Partners essential to the system of care must be fully on board and officially on board.
61 There should be academic/public (research/practice) partnerships.
62 Develop a process to better understand the realities of each of the major stakeholders so system change can occur by devising win-win situations rather than relying on good will alone.
63 The agency to receive funds should have a positive audit with minimal discrepancies for at least three consecutive years; they should spell out precisely if there will be any fiduciary or subcontracted agent that will manage funds, and if so, the subcontractor(s) should also have audits available for review.
64 There should be a commitment to measurement of progress and outcomes.
65 There should be a mechanism for communicating to the community the goals and the progress toward those goals in developing a system of care.

66 The fiscal agent should be independent of any and all of the partner agencies so as not to appear to have control over the budget.
67 The project leadership should understand how a social marketer can help with communication and the role that he/she plays before, during and after the grant period.
68 There must be shared power and decision making among stakeholders.
69 All community partners have a clear understanding of the required investment, and similar expectations regarding the Return of Investment (ROI).
70 A commitment from leadership at major child serving systems to a family-driven, youth-guided care system of care (SOC) is essential to success.
71 State and/or county support is needed - not only to support the proposed service delivery changes, but to support/allow flexibility for larger system change initiatives (proposed changes in funding structure, for example).
72 The collaborative should validate a needs assessment.
73 There should be a comprehensive needs assessment that provides insight into the barriers to change within the community.
74 There should be established linkages to facilities utilized for out of home placements and policy of involving parents in treatment and discharge planning.
75 A strong collaborative team must be in place, ideally with some past history and prior success on earlier projects that involve system change.
76 There needs to be accountability within the collaborative body for follow through and commitment from the boards that control them.
77 There needs to be a strong trusting working relationship among all collaborating parties.
78 Families are willing to take on a lead role in taking the vision to reality.
79 There should be a well defined, clear and articulated decision-making structure.
80 The participants at the planning stage must include parents, providers, advocates, local funders, youth, educators, local leaders, and all those who will be a part of the system of care.
81 The staff and the community partners should have a demonstrated knowledge of characteristics of SED population to be served.
82 There should be a plan for substantial financial support for family involvement - controlled by families being served.
83 Families have been at the table throughout the visioning process.
84 Agreements between the state and local agencies need to be in place so that changes in administrations midway through the 6 years of funding don't derail the momentum and progress of the project.
85 There must be programs in place that address the diverse needs (cultural and linguistic competence) of the population of focus.
86 Collaborative partnerships should be established within the community and partners are willing to have open discussions and come to agreement on what some of the barriers and obstacles there are to making the systems change necessary to have a good system
87 There should be an understanding of community assets that can be used in building the system.
88 There should be an agreement to have family advocates on staff.
89 There must be a commitment from policy makers, community leaders, partners, and staff to the system of care values and principles.

90 It needs to be understood that sustainability of services developed should be part of the discussions beginning in the 1st year not waiting until the end.
91 Leaders should be willing to be challenged and are able to experience discomfort when it comes to movement and change.
92 There should be consensus among top level local system leadership on the role of a cooperative agreement.
93 There is a willingness to work in a fair, inclusive and open manner.
94 Infrastructure needs to be put in place to ensure implementation of major SOC values such as collaboration.
95 It would be helpful if school district and medical professionals were required to be in the collaborative agreement.
96 There should be a governance body that is powerful and independent of any specific provider in the community.
97 Commitment to ensure that cultural and linguistic competence should be represented in both conceptualization and implementation of all activities.
98 There should be a fully functioning advisory board or other group that represents key program partners including youth and family voice.
99 There must be a plan for volunteer development.
100 The community should dedicate sufficient resources to support cultural and linguistic proficiency.
101 There should be a clear understanding with local community organizations and municipalities of where the community is with a vision of where they want to be within a given period of time.
102 The lay community needs to be made aware of the potential services in order to be willing to provide additional funding.
103 Develop a method of sharing real time useful information to identify important system trends and to provide the requisite information for data based decision making.
104 It is important for services to be designed to be customer driven and strength and solution focused.
105 There should be an understanding of blended or braided funding and the willingness among the community agencies to share resources.
106 A well developed understanding by the state level personnel with decision making authority is absolutely necessary.
107 An advisory or leadership board should be established that has at least 1/3 parent participation and they should have input on the writing of the proposal.
108 There should be an agreement to share information across child-serving systems.
109 There needs to be an understanding of and buy-in of the use of the research to help address what is working and what can be improved at in the community.

APPENDIX B

Explanation of Map Development

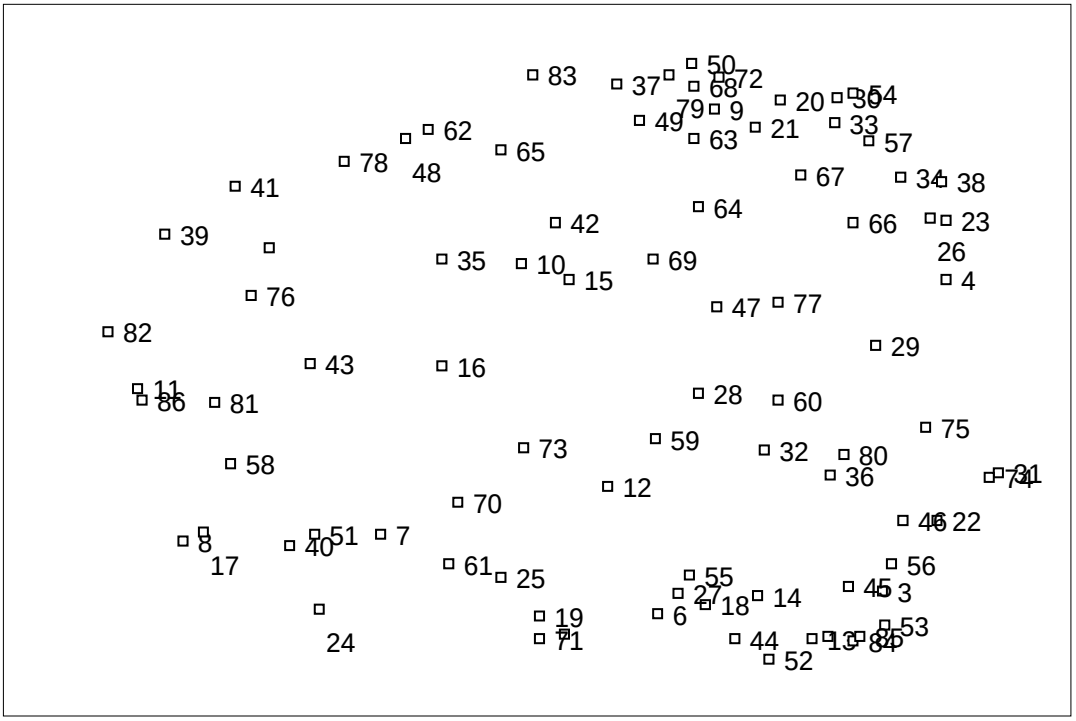
Explanation of Map Development[21]

Background Information about Maps and Graphs

Point Map: The first product in concept mapping is the generation of a point map which provides a summary of the sorting process. The statements are analyzed using multivariate statistical techniques. A map is created, using the group's average ratings of the statements as points on the map. Statements perceived to be similar to one another, based on the group's sorting, are positioned close to each other and statements perceived to be dissimilar are located farther apart.

Example 1

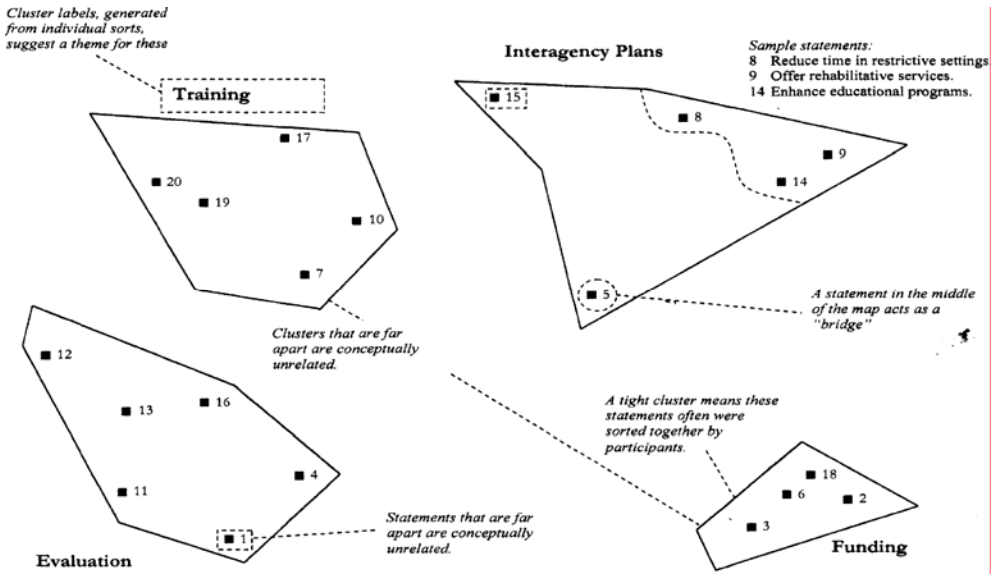
Point Map



Cluster Map: The cluster map is derived from the point map using a statistical method that groups the statements into clusters. Similar statements are grouped together in non-overlapping categories called clusters based on their proximity to one another. The analysis also mathematically selects the best-fitting label for each cluster from all of the pile labels generated by all of the participants. The labels are examined in relation to the statements in each cluster, and if the analysts determine that the suggested label does not appropriately cover the content, the next best fitting label is examined until an appropriate cluster label is identified. The cluster map depicts the areas of focus that the participants generated when they sorted the statements.

[21] From Kane & Trochim, 2007

Example 2
Cluster Map



Sample Statement and Cluster Concept Map: The maps above illustrate the main features of a concept map. The maps do not include real data; the clusters and statements are used for illustration only and have no relation to the concept mapping process in the Community Readiness study.

Guidelines for Interpreting Concept Mapping Data

An explanation of the three major components of concept map analysis includes 1) the point (statement) map and cluster map, 2) the point (statement) map and cluster ratings, and 3) the consensus pattern match.

Point (Statement) Map and Cluster Map: As described above, the statements generated in a brainstorming session are sorted by the participants and then the results of the sorting process are analyzed. The analysis produces a point map first and then a cluster map. The point map shows the spatial relationship of the points, each of which represents a statement. Points closer to one another are those that were sorted together most often and should be similar in meaning. Those points far away from each were not sorted together often and should not be conceptually similar. The point map shows the arrangement of statements in terms of proximity to each other. Boundaries are then put around statements that seem to form a common grouping, i.e., a cluster. The cluster map provides a more clearly defined picture of the relationship of the items, as they have been sorted (arranged) by the participants. The characteristics of the cluster map are:

- The location of points (statements) on a map is important in relation to other statements.
- The distance between statements is important, but placement at top, bottom, left, right is not relevant (you can flip the map in any direction).

- The relationship of clusters to one another is similar to the relationship of statements; i.e., those closer together are more closely related.
- Cluster titles are generated from an analysis of participants' sorting labels based on statistical computations.
- In finding the themes of a map, it is helpful to consider how the clusters relate conceptually to one another.
- The size of a cluster does not indicate importance. A small dense cluster indicates that statements were grouped together often; a large spread out cluster may contain items that are related but not grouped together by a large number of participants.
- When ideas on a map are distinct, the statements may be clustered tightly together and away from other clusters on the map.
- A large cluster may indicate an idea that is broad or that the cluster bridges two related ideas.
- If a large cluster bridges two related ideas, the cluster will be positioned between the clusters it bridges.
- Clusters in the middle of a map are usually bridging clusters, meaning they include ideas that are linked to multiple regions on the map.
- Clusters that are conceptually clear end up on the edges of the map because participants often sort the statements in them together and sort them with other statements less often.

Statement and Cluster Ratings: After sorting the statements that "go together" into piles, the participants used a list of the statements and rated them for importance of each statement and the feasibility of each statement, using the five-point scale described above.

- Tables and/or maps are used to show the ratings, i.e., average Importance and Feasibility ratings for each statement across all of the raters or separately for each of the two groups.
- The ratings for Importance and Feasibility shown in tables or on the rating maps are calculated as an average of the average ratings for statements in those clusters.
- Although one statement in a cluster may have a very high rating, the cluster average will be low if other statements in that cluster are rated low.

Consensus Pattern Match: Consensus pattern matches, represented by ladder graphs, can be used to compare participant responses on the ratings of importance compared with feasibility.

- The rating scale is represented on the vertical lines of the ladder graph. Each of the horizontal lines represents a cluster.
- If there is agreement in ratings between Importance and Feasibility, the cross lines will be horizontal.
- The "r" value indicates correlation between the two ratings. +1.0 indicates a perfect positive correlation (ratings are very similar to one another); -1.0 indicates a perfect negative correlation (ratings are very dissimilar); 0 indicates no correlation.

APPENDIX C

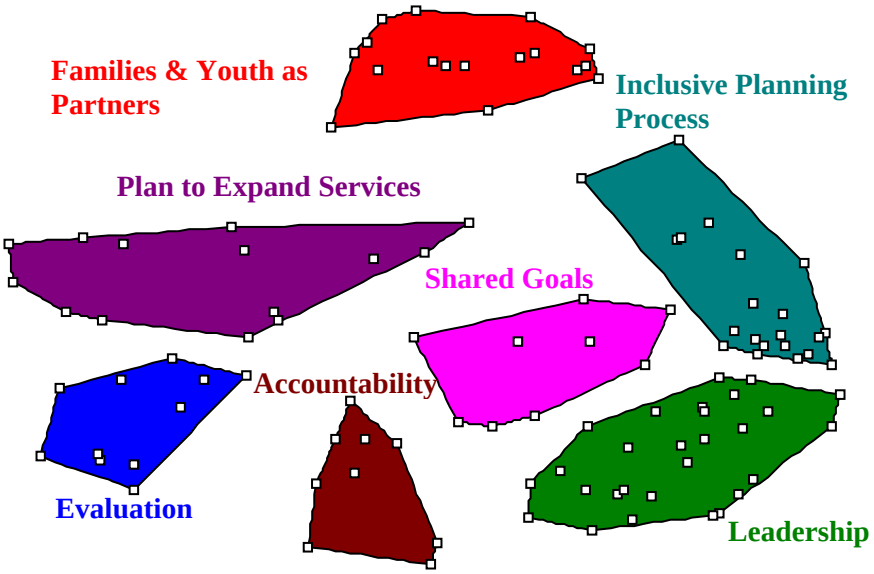
Comparison of Clusters

Comparison of the Cluster Solutions for Seven, Eight and Nine Clusters

The investigators selected the eight cluster solution to be best because 1) clusters beyond eight appeared to break apart concepts that seemed to go better together and 2) clusters less than eight seemed to include ideas that looked like they ought to be separated.

Seven Clusters (Figure 4, below): In the seven cluster solution, one of the clusters, labeled Inclusive Planning Process, is a large cluster with items distributed in three somewhat distinct areas of the cluster. The scattering of the items in this cluster suggests dividing it into more clusters, as there are two, if not three, relatively distinct "clumps" of items. As described earlier, one characteristic of a cluster map, is that "a large spread out cluster may contain items that are related but not grouped together by a large number of participants."

Figure 4
Seven Cluster Solution



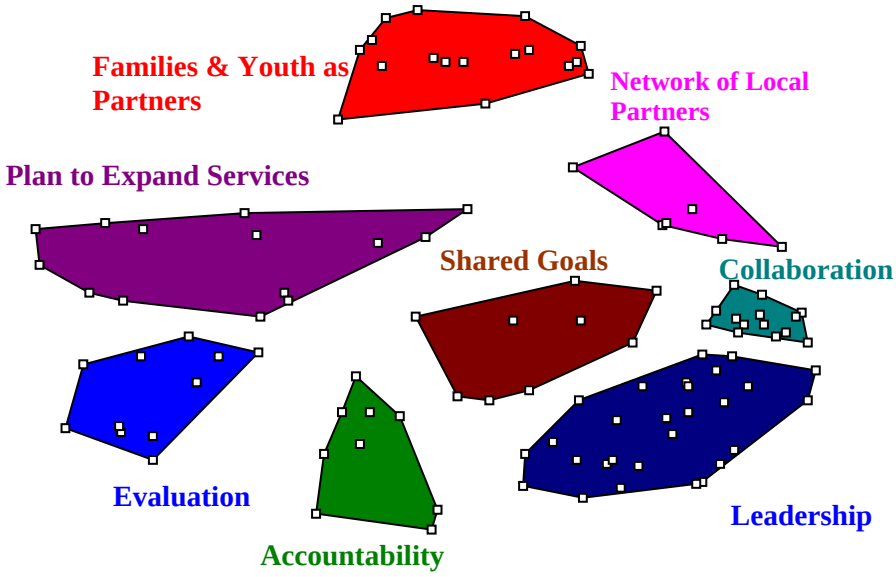
An examination of the items within the cluster shows that the two items at the top of the cluster relate to families and youth (the adjoining cluster) but more strongly seemed linked to Inclusive Planning Process, as the items have to do with making sure that the planning process includes families but also other ps. These items are

- There should be active participation from families, youth and front-line workers from public and private sectors in the implementation of the system.
- An advisory or leadership board should be established that has at least 1/3 parent participation and they should have input on the writing of the proposal.

Given the stronger emphasis in these two items on the planning process than on family issues, it would seem that the two items are better left in the planning cluster. The items in the middle of the cluster also relate to establishing partnerships with others in the community, while the grouping at the bottom of the cluster seems to relate more to collaboration activities. Given this configuration, it seems valuable to look further at an eight cluster solution.

Moving from Seven Clusters to Eight (Figure 5, below): In moving from seven clusters to eight, the Inclusive Planning Process cluster divides into two clusters labeled Network of Community Partners and Collaboration. Examination of the individual items involved in these changes indicates two groups of different ideas, with the first focusing on creation of and the make up of the local partnerships and the second focusing on collaboration activities. Thus, the eight cluster solution seems better than the seven cluster solution.

Figure 5
Eight Cluster Solution



Moving from Eight Clusters to Nine (Figure 6, below): In moving from eight clusters to nine clusters, the cluster called Leadership breaks apart and results in two clusters titled Leadership and Governance. Examination of the items that now appear in the two separated clusters suggests that they have a relatively similar focus, if one considers leadership a part of governance or conversely, governance a part of leadership.

Although in general thinking there may be differences between leadership and governance, an examination of the items in these two clusters indicates that keeping them as one cluster seems better. The two clusters are close together on the map indicating that they are closely related. Examining the Leadership cluster in Figure 5, the Eight Cluster Solution, shows a large cluster with items somewhat uniformly scattered. Thus, leaving the Leadership cluster intact and choosing an eight cluster solution seems best.

Figure 6
Nine Cluster Solution